

1762

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of: Smith *et al.*

Serial No.: 09/757,073

Filed: 01/08/2001

For: Polyol-Based Method For Forming Thin Film Aerogels On Semiconductor Substrates



Docket: TI-22782B

Examiner: E. Cameron

Art Unit: 1762

INFORMATION DISCLOSURE STATEMENT

RECEIVED

MAR 06 2001

February 21, 2001

Assistant Commissioner For Patents
Washington, D. C. 20231

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addressed to: Assistant Commissioner for Patents, Washington,
DC 20231 on
February 23, 2001.
Tina Rendon
Tina Rendon

Examiner:

Applicants wish to bring to the attention of the Patent and Trademark Office the information noted on the enclosed PTO-1449. Many of these references were cited in related applications. References DI and DJ are in a foreign language. Their known relevance is that they were cited in a related application. English translations of the abstracts of references DI and DJ are included with the submission.

Copies of reference(s) AA - AW, BA - BV, CA - CX, DA - DE, DG - DU, and EE - EN are enclosed. Applicants believe that no fee is due. However, please charge any required fee to the deposit account of Texas Instruments Incorporated, Account No. 20-0668.

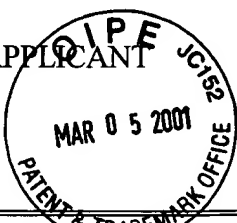
Respectfully submitted,

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FORM PTO-1449 (REV. 7-80)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE			ATTY. DOCKET NO. TI-22782B		SERIAL NO. 09/757,073	
LIST OF DOCUMENTS CITED BY APPLICANT (Use several sheets if necessary)					APPLICANT Smith <i>et al.</i>		RECEIVED MAR 06 2001 TC 1700 FILING DATE 01/08/2001	
					FILING DATE 01/08/2001			
U.S. PATENT DOCUMENTS								
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)	
	AA	3,652,216	3/28/72	Krekeler, et al.	23	182		
	AB	3,689,637	9/5/72	Pader	424	52		
	AC	3,860,431	1/14/75	Payne <i>et al.</i>	252	309		
	AD	3,997,501	12/14/76	McLeod	260	37SB		
	AE	4,104,363	8/1/78	Vozka, et al.	423	338		
	AF	4,169,926	10/2/79	McDaniel	526	100		
	AG	4,230,773	10/28/80	Bakos	428	447		
	AH	4,230,803	10/28/80	Weidenbach <i>et al.</i>	435	176		
	AI	4,311,738	1/19/82	Chi	427	387		
	AJ	4,548,646	10/22/85	Mosser, et al.	106	14.12		
	AK	4,584,365	04/22/86	Jada <i>et al.</i>	528	271		
	AL	4,608,316	08/26/86	Toda <i>et al.</i>	428	446		
	AM	4,652,467	03/24/87	Brinker <i>et al.</i>	427	246		
	AN	4,713,233	12/15/87	Marsh <i>et al.</i>	423	608		
	AO	4,851,150	07/25/89	Hench <i>et al.</i>	252	315.6		
	AP	4,943,542	7/24/90	Hayashi <i>et al.</i>	501	12		
	AQ	4,954,327	09/04/90	Blount	423	338		
	AR	4,987,101	01/22/91	Kaanta <i>et al.</i>	437	228		
	AS	5,076,980	12/31/91	Nogues <i>et al.</i>	264	65		
	AT	5,091,009	2/25/92	Nogami <i>et al.</i>	106	287.23		
	AU	5,097,317	03/17/92	Fujimoto <i>et al.</i>	357	72		
	AV	5,103,288	04/07/92	Sakamoto <i>et al.</i>	357	71		
	AW	5,139,980	8/18/92	Nakahara <i>et al.</i>	501	12		
	AX							
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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LIST OF DOCUMENTS CITED BY APPLICANT <i>(Use several sheets if necessary)</i>							APPLICANT Smith <i>et al.</i> FILING DATE 01/08/2001	
					GROUP 1762 RECEIVED MAR 06 2001 TC 1700			
U.S. PATENT DOCUMENTS								
*EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)		
	BA	5,155,576	10/13/92	Mizushima	357			
	BB	5,207,814	05/04/93	Cogliati <i>et al.</i>	65	18.3		
	BC	5,226,930	7/13/93	Sasaki	51	308		
	BD	5,242,647	09/07/93	Poco	264	225		
	BE	5,270,027	12/14/83	Balducci, <i>et al.</i>	423	338		
	BF	5,275,796	01/04/94	Tillotson <i>et al.</i>	423	338		
	BG	5,294,480	03/15/94	Mielke <i>et al.</i>	428	240		
	BH	5,302,548	04/12/94	Watanabe <i>et al.</i>	437	187		
	BI	5,320,983	06/14/94	Ouellet	437	231		
	BJ	5,352,637	10/4/94	Fabry, <i>et al.</i>	437	238		
	BK	5,368,887	11/29/94	Hoshino <i>et al.</i>	427	226		
	BL	5,391,364	02/21/95	Cogliati	423	335		
	BM	5,393,712	02/28/95	Rostoker <i>et al.</i>	437	238		
	BN	5,405,805	04/11/95	Homma	437	195		
	BO	5,409,683	04/25/95	Tillotson <i>et al.</i>	423	338		
	BP	5,457,073	10/10/95	Ouellet	437	231		
	BQ	5,489,553	02/06/96	Chen	437	195	05/25/95	
	BR	5,494,863	2/27/96	Mathur	501	12	12/13/94	
	BS	5,496,527	03/05/96	Yokogawa <i>et al.</i>	423	338	04/28/94	
	BT	5,522,976	6/4/96	Campet, <i>et al.</i>	204	298.13	6/94	
	BU	5,698,483	12/16/97	Ong <i>et al.</i>	501	12	3/17/95	
	BV	5,746,992	05/05/98	Yoldas <i>et al.</i>	423	338	10/5/95	
	BW							
	BX							
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
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OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>								
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LIST OF DOCUMENTS CITED BY APPLICANT <i>(Use several sheets if necessary)</i>					APPLICANT Smith et al. FILING DATE 01/08/2001		RECEIVED MAR 06 2001 1762	
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*EXAMINER • INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)		
	CA	5,470,802	11/28/95	Gnade et al.	437	238	05/20/94	
	CB	5,472,913	12/05/95	Havemann et al.	437	195	08/05/94	
	CC	5,488,015	01/30/96	Havemann et al.	437	195	05/20/94	
	CD	5,494,858	02/27/96	Gnade et al.	437	231	06/07/94	
	CE	5,504,042	04/02/96	Cho et al.	437	247	06/23/94	
	CF	5,519,250	05/21/96	Numata	257	632	06/07/95	
	CG	5,523,615	06/04/96	Cho et al.	257	632	06/07/95	
	CH	5,525,857	06/11/96	Gnade et al.	313	309	08/19/94	
	CI	5,536,965	07/16/96	Beratan et al.	257	444	06/07/95	
	CJ	5,548,159	08/20/96	Jeng	257	634	05/23/95	
	CK	5,561,318	10/01/96	Gnade et al.	257	638	06/07/95	
	CL	5,656,848	08/12/97	Beratan et al.	257	446	06/07/95	
	CM	5,661,344	08/26/97	Havemann et al.	257	758	06/07/95	
	CN	5,723,368	3/3/98	Cho et al.	437	763	6/7/95	
	CO	5,736,425	04/07/98	Smith et al.	438	778	11/14/96	
	CP	5,747,880	5/5/98	Havemann et al.	257	759	11/18/96	
	CQ	5,750,415	5/12/98	Gnade et al.	427	195	5/27/94	
	CR	5,753,305	05/19/98	Smith et al.	427	335	11/14/96	
	CS	5,789,819	08/04/98	Gnade et al.			06/07/95	
	CT	5,804,508	09/08/98	Gnade et al.			10/23/96	
	CU	5,807,607	09/15/98	Smith et al.			11/14/96	
	CV	5,847,443	12/08/98	Cho et al.			11/14/96	
	CW	5,858,871	01/12/99	Jeng			06/13/96	
	CX	5,955,140	09/21/99	Smith et al.			11/14/96	
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	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION		
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OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>								
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LIST OF DOCUMENTS CITED BY APPLICANT <small>(Use several sheets if necessary)</small>					APPLICANT Smith <i>et al.</i> FILING DATE 01/08/2001		
U.S. PATENT DOCUMENTS							
*EXAMINER * INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)	
	DA	6,037,277	03/14/00	Maskara <i>et al.</i>			11/14/96
	DB	6,063,714	5/16/00	Smith <i>et al.</i>			11/14/96
	DC	6,130,152	10/10/00	Smith <i>et al.</i>			11/14/96
	DD	6,159,295	12/12/00	Maskara <i>et al.</i>			04/22/99
	DE	6,171,645	01/09/01	Smith <i>et al.</i>			07/15/98
	DF						
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						YES	NO
	DG	0 382 310 A2	08/16/90	Europe		n/a	
	DH	0 454 239 A2	10/30/91	Europe		n/a	
	DI	JP-A-54 109765	08/28/79	Japan		of abstract	
	DJ	JP-A-06 293971	10/21/94	Japan		of abstract	
	DK	WO 92/03378	03/05/92	PCT		n/a	
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	DL	Tillotson <i>et al.</i> , "Transparent ultralow-density silica aerogels prepared by a two-step sol-gel process", JOURNAL OF NON-CRYSTALLINE SOLIDS, 145 (1992), pp. 44-50.					
	DM	D. Basmadjian <i>et al.</i> , "The Control of the Pore Volume and Pore Size Distribution in Alumina and Silica Gels by the Addition of Water Soluble Organic Polymers", December 1962, JOURNAL OF CATALYSIS, Volume 1, Number 6, pp. 547 - 563.					
	DN	Fricke <i>et al.</i> , "Aerogels", May 28, 1992, J. AM. CERAM. SOC., 75(8), pp. 2027-2036.					
	DO	Einarsrud <i>et al.</i> , CHEM. PROCESS. ADV. MATL., (1992) pp. 355 - 361. (abstract only)					
	DP	Haereid, Siv <i>et al.</i> , "Mechanical Strengthening of TMOS-Based Alcohols by Aging in Silane Solutions", 1994, JOURNAL OF SOL-GEL SCIENCE AND TECH., Vol. 3, pp. 199-204.					
	DQ	Haereid, Siv, "Preparation and Characterization of Transparent, Monolithic Silica Xerogels with Low Density", January 1993, Norwegian Institute of Technology, Dept. Of Inorganic Chemistry.					
	DR	Hrubesh <i>et al.</i> , "Dielectric Properties of Aerogels", J. MATERIALS RESEARCH, Vol. 8, No. 7, July 1993, pp. 1736-1741.					
	DS	V. S. Klimenko, L. A. Kulik, and V. V. Vashchinskaya, "Dependence of the Composition and Structure of Silicic Acid Xerogels on the Nature of the Solvent", 1986, UKRAINSKII KHIMICHESKII ZHURNAL, Vol. 52, No. 12, pp. 1247 - 1251.					
	DT	Smith <i>et al.</i> , "Preparation of low-density xerogels at ambient pressure", JOURNAL OF NON-CRYSTALLINE SOLIDS, 186 (1995) pp. 104 - 112.					
	DU	Yokogawa, H., Yokoyama, M., "Hydrophobic Silica Aerogels", JOURNAL OF NON-CRYSTALLINE SOLIDS, 186 (1995) pp. 23-29.					
	DV						
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LIST OF DOCUMENTS CITED BY APPLICANT <i>(Use several sheets if necessary)</i> <div style="border: 1px solid black; border-radius: 50%; width: 100px; height: 100px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">PATENT & TRADEMARK OFFICE</div> <div style="text-align: center;">MAR 05 2001</div> </div>					APPLICANT Smith <i>et al.</i>		TC 1700 MAR 06 2001 1762	
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	EB							
FOREIGN PATENT DOCUMENTS								
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	EC						YES	NO
	ED							
OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>								
	EE ✓	Poco <i>et al.</i> , "A rapid Supercritical Extraction Process for the Production of Silica Aerogels", MAT. RES. SOC. SYMP. PROC. Vol. 431 (1996) pp. 297-302, Materials Research Society.						
	EF ✓	Prakash <i>et al.</i> , "Ambient-Pressure silica Aerogel Films", MAT. RES. SOC. SYMP. PROC. Vol. 371 (1995) pp. 205-210, Materials Research Society.						
	EG ✓	Smith <i>et al.</i> , "Preparation of Low-Density Xerogels at Ambient Pressure for Low K Dielectrics", MAT. RES. SOC. SYMP. PROC. Vol. 371 (1995) pp. 261-272, Materials Research Society.						
	EH ✓	U.S. Patent Application Serial No. 08/746,688 filed 11/14/96						
	EI ✓	U.S. Patent Application Serial No. 08/748,927 filed 11/14/96						
	EJ ✓	U.S. Patent Application Serial No. 09/178,715 filed 10/26/98						
	EK ✓	U.S. Patent Application Serial No. 09/324,370 filed 06/02/99						
	EL	U.S. Patent Application Serial No. 09/488,185 filed 01/20/00						
	EM	U.S. Patent Application Serial No. 09/549,289 filed 04/14/00						
	EN	U.S. Patent Application Serial No. 09/573,564 filed 05/19/00						
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